Opioid Addiction & Methadone Maintenance Treatment

Dr. Nick Wong MD, CCFP
AADAC Edmonton ODP
AADAC – AHMB Concurrent Disorder Series
September 13, 2007

What is Methadone?
- What is methadone?
  - Synthetic opioid.
- Where was methadone invented?
  - Germany during WWII
- When did methadone begin being used for opioid addiction?
  - 1960s – Dr. Dole & Dr. Nyswander (New York), Dr. Halliday in Canada (BC)

What is an Opioid?
- What is an opiate?
  - A drug containing or derived from opium – usually to ease pain or induce sleep.
- What is an opioid?
  - Any compound resembling morphine in its addictive properties or its physiological effects.
Commonly Rx Opioids
- Codeine (Tylenol #1, #3, Cough syrup, …)
- Morphine (Kadian, MS-Contin, …)
- Oxycodone (Percocet, Oxycontin, …)
- Hydromorphone (Dilaudid, Hydromorph Conti, …)
- Fentanyl (Duragesic, …)
- Meperidine (Demerol)
- Propoxyphene (Darvon)

Opioid Withdrawal Symptoms
- Physical symptoms – like a bad case of the flu
  - Body aches – muscle/bones, arthralgia
  - Nausea, vomiting, diarrhea, abdominal pain
  - Rhinorhea, sneezing, tearing, sweating/chills, goosebumps, yawning
  - Restless, insomnia, fatigue, anxiety
- Physical dependence and/or tolerance does not necessarily equal addiction.

Red Flags
- Lost or stolen Rx
- Early Rx refill
- Rapidly escalating use
- Missed appointments
- Reports multiple medication sensitivities (ie. NSAIDs and Codeine)
Red Flags
- Has sophisticated knowledge of drugs
- Seems more concerned about the Rx than the problem
- Doesn’t comply with other treatments/investigations
- Rx from multiple physicians
- Other drug use – including EtOH

What to do?
- Confront that there may be a problem – ignoring it will only make it worse.
- Enquire why they are misusing the medication?
- Increase control of the dispensing of medications (see ‘Safety checks’ below)
- If there are continued problems with misuse, discuss tapering off (can also support withdrawal process with clonidine).

What to do?
- Consider addiction counseling/Detox/Treatment Centre
- Ask for help – colleagues
  - Pain clinic
  - MMT program
- If there is both addiction and chronic pain – need to deal with the addiction first.
### Safety Checks
- Assess the patient more frequently and prescribing smaller amounts.
- Shorten dispensing interval – daily to q1-2wks
- Circle numbers or spell out amounts
- Fax Rx
  - know where Rx is being filled
  - not easily alterable
  - can’t be ‘lost’ (filled at different pharmacy)

### Safety Checks
- Contract – verbal or written (see CPSO sample contract)
  - Lost, stolen or misused medication won’t be replaced
  - Only physician to Rx medication
- TPP report from the College of Physician and Surgeons of Alberta
- Pharmacy to fax list of meds over
- Drug screen

### What is Addiction?
- **The 4 Cs of Addiction**
  - Loss of **CONTROL**
  - Use despite **CONSEQUENCES**
  - ** CRAVING**
  - Increased **COMPULSION** to use
CPS – The Street Version

- Dilly
  - Dilaudid (usually 4mg or 8mg)
- Red
  - MS-Contin 200mg
- Oxy
  - Oxycontin (usually 40mg or 80mg)

CPS – The Street Version

- Grey
  - MS-Contin 100mg
- Peach
  - MS-Contin 60mg
- Down
  - Opioid

How Much is Enough?

- What is a typical opioid tolerance?
  - Equivalence to morphine 400-600mg iv qd.
- Why haven’t I yet talked about heroin?
  - Not cost effective – poor quality.
- How much is a “grey”?
  - $15-20 – depending if you buy in bulk
  - Daily cost – $60-100 per day
How Much is Too Much?

- Not all people who start MMT are using the stronger opiates or intravenously – some people use codeine (Tylenol #1 is OTC).
- What do you think are common amounts of Tylenol #1 that some people starting MMT are using?
  - Can range from 50-150 tablet PO per day!

Why Methadone?

- Provides relief from acute physical withdrawal symptoms.
- Suppresses the cravings for opioids without euphoric effects.
- Partially blocks the euphoric effects of other opioids.
- Most patients require only once a day dosing.

Why Methadone?

- No known long-term physiological effects with minimal side effects
- No effect on cognitive function when in appropriate dose
- Safe in pregnancy and shown to improve prenatal outcome.
How is MMT started?
- Daily witnessed ingestion.
- Liquid methadone mixed with a crystalline juice.
- Initial dose 20-40 mg, increased up to 10 mg every four days.
- Continued titration upwards until a stable dose is reached.
  - No withdrawal symptoms
  - No cravings

Tang

Methadone 24 Hour Dose Response

0 hrs. 24 hrs.

“Loaded”
“High”
Normal Range
Subjective w/d
Objective w/d
How long should a patient be on MMT?
- As long as the patient derives benefit – indefinitely.
- A voluntary taper off methadone is a personal decision the patient makes.

Replacing One Addiction for Another?
- **CONTROL**
  - MMT gives back control to the patient.
- **CONSEQUENCES**
  - Patient able to start rebuilding their lives.
- **COMPULSION**
  - Patient no longer compulsively using opioids.
- **CRAVING**
  - Patient’s cravings are controlled.

The Cucumber & The Pickle

“You can turn a cucumber into a pickle, but you can’t turn a pickle back into a cucumber.”
Pain & Methadone

- Analgesic effect of methadone is usually much shorter than withdrawal prevention effect.
- Patients on MMT will require treatment for acute pain – "MMT takes the patient to baseline".
- Dose of analgesics for these patients are typically increased compared to opioid naïve patients.
- Some patients notice improvement in their chronic pain on MMT though some may also need other medications/treatment.

Methadone & Pregnancy

- Safe to use during pregnancy
- Improved prenatal care
- Improved nutrition
- Decreased incidence of maternal opioid withdrawal
- Engagement in alcohol and drug programs
- Decreased criminality and sex-trade work
- Decreased injection use / risk of blood borne infections

Questions/Discussion
Thank you for your participation

For information about Telemental Health learning events:
- (403) 783-7736
- www.amhb.ab.ca
  - Initiatives
  - Telemental Health
  - Telelearning
  - Current Telelearning Sessions